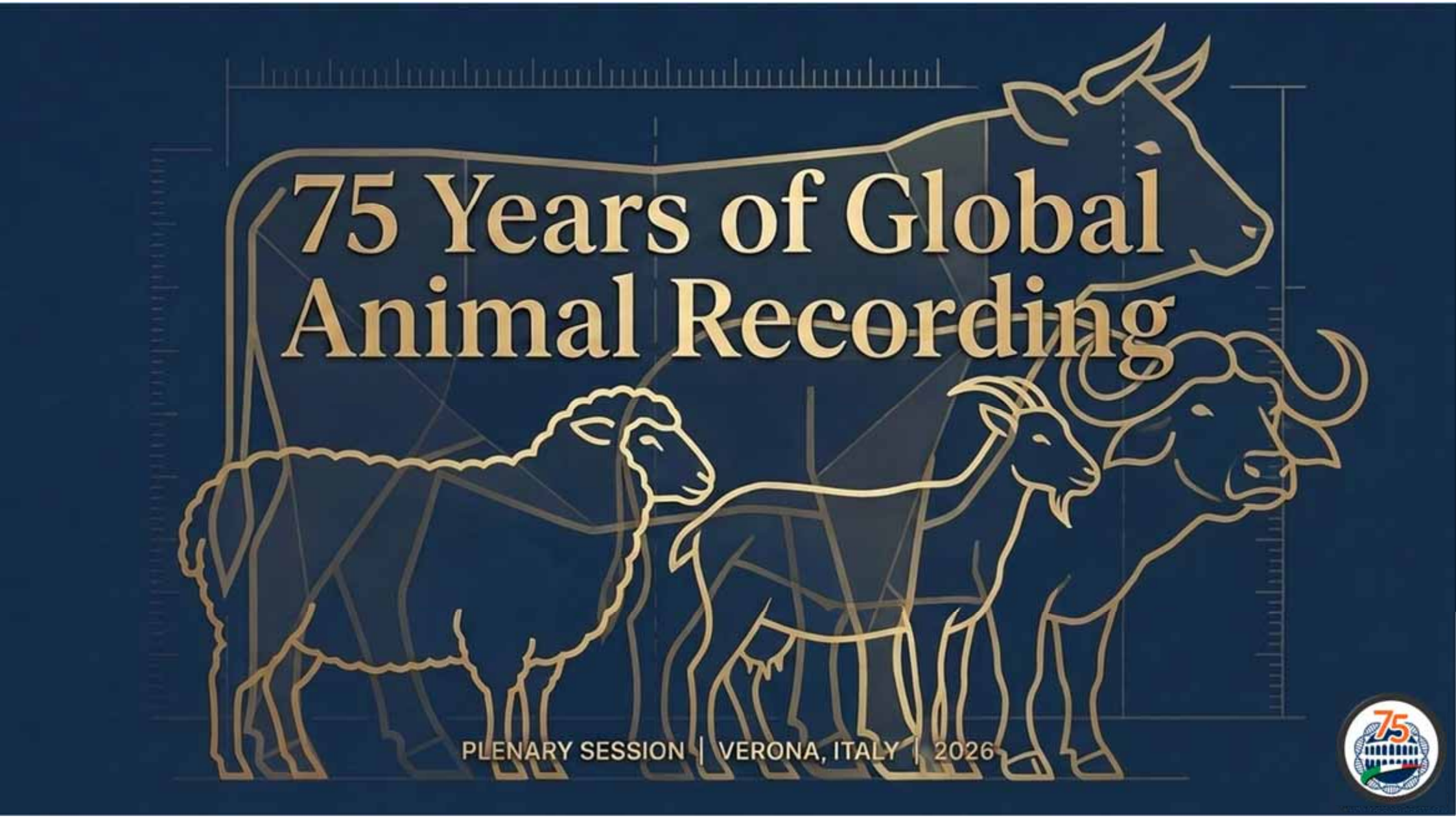

75 Years of Global Animal Recording
PLENARY SESSION | VERONA, ITALY | 2026

The 1951 Genesis of ICAR

10 Countries...
"European Milk and Butter Control"

A unified, cross-border coalition of state ministries and agricultural associations established the global standard for animal recording.

Norway (Oslo)
S. Berge
Landbruksdepartementet

Scotland (Edinburgh)
Alexander MacCaig
Scottish Milk Records Association

Denmark (Roskilde)
Tage Andersen
De Danske Kontrolforeningers Landsudvalg

Spain (Madrid)
Eladio Morales y Frailo
Ministerio de Agricultura

France (Paris)
A.M. Leroy (First ICAR President, 1951)
Comité Fédératif National du Contrôle Laitier et Beurrier

Netherlands (Arnhem)
T.C.J.M. Rijssenbek
Centrale Melkcontrole Dienst

Germany (Bonn)
A. Rinecker
Bundesministerium für Ernährung, Landwirtsahaft und Forsten
Robert Winnigstedt
Arbeitsgemeinschaft Deutscher Rinderzüchter e.V.

Luxembourg (Luxembourg)
Arnold Anen
Fédération des Herdbooks Luxembourgeois

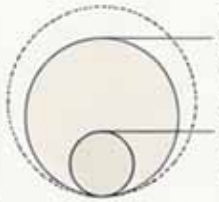
Austria (Wien)
G. Roessler
Bundesministerium für Land- und Forstwirtschaft

Italy (Rome)
B. Maymone
Ministero dell'Agricoltura e delle Foreste
Leonardo Albertini
Associazione Italiana Allevatori

Institutional Taxonomy

- Government / Ministry Representation
- Industry / Breeding & Milk Associations

The Scale of Growth



2026
60 Member Countries | 134 Global Organizations (83 full, 51 associate)

1951
10 Founding Nations | 12 Inaugural Members

Problem-Solving Guidelines

The Problem

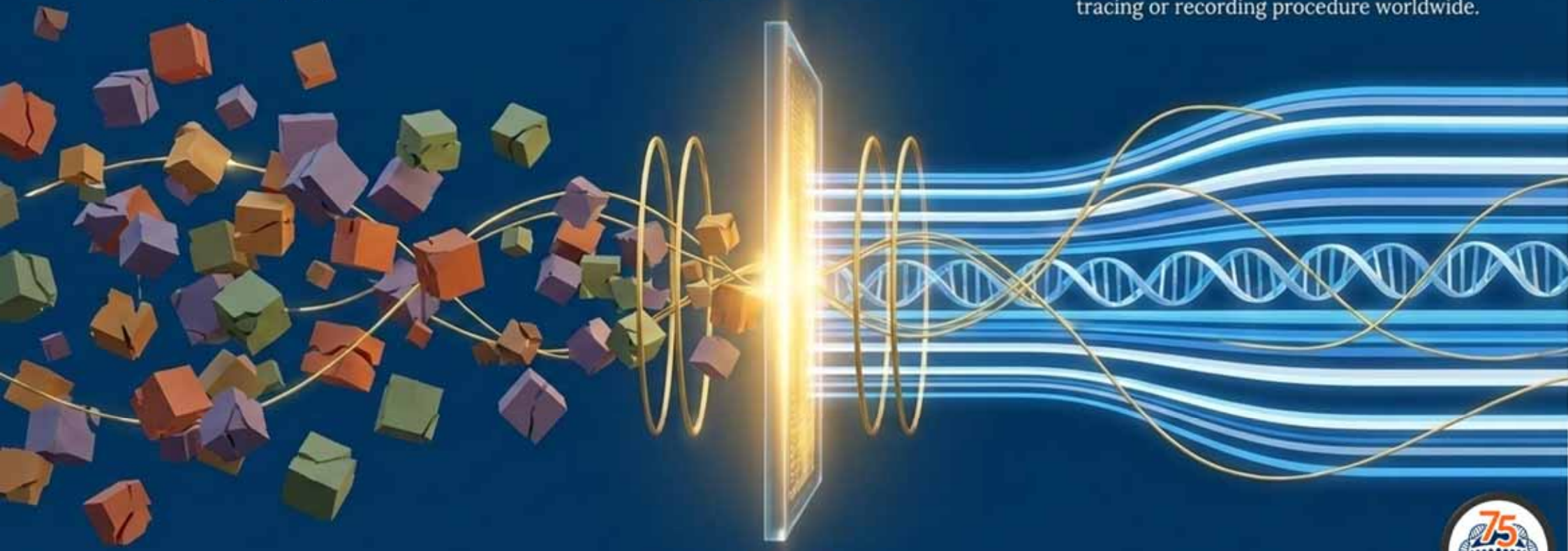
Fractured, incompatible recording systems prevent trade and stall genetic progress.

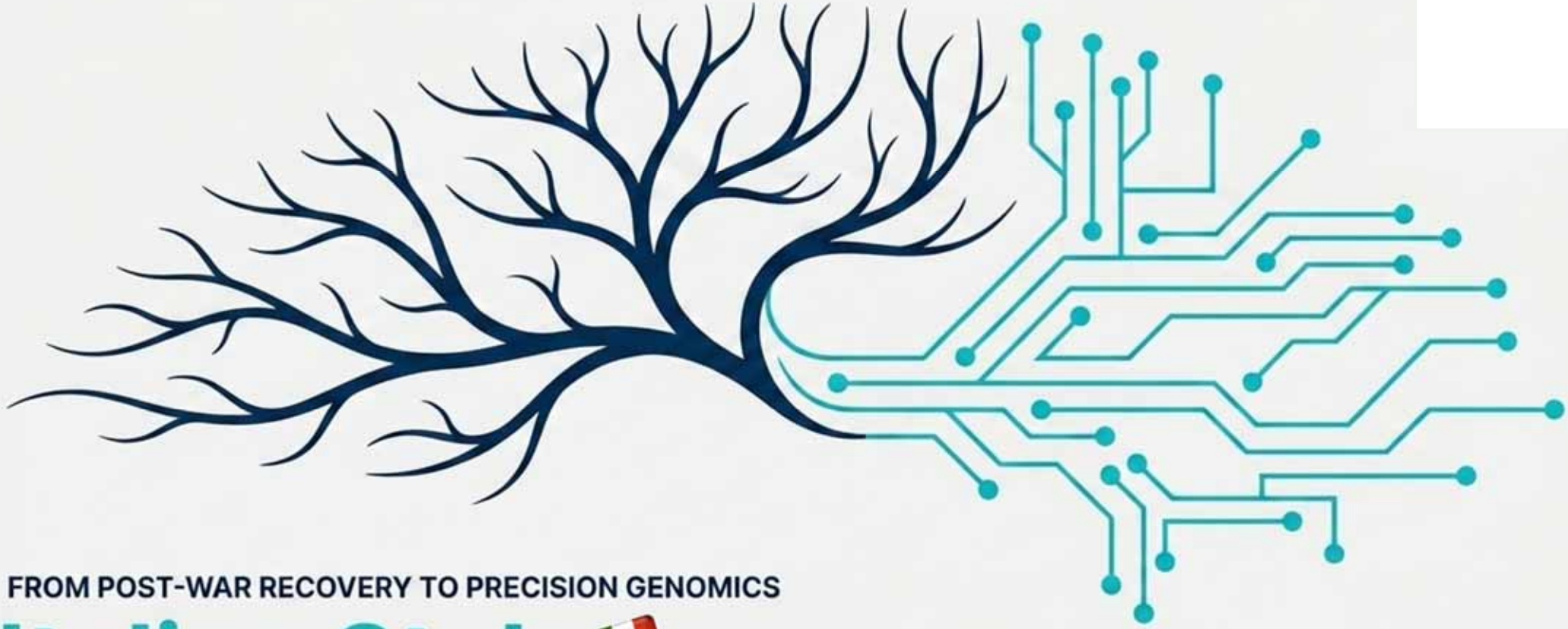
The ICAR Solution

Standardizing animal identification (ISO 11784/11785), parentage recording, and performance metrics.

The Outcome

Guidelines serve as minimum requirements that provide maximum flexibility, guaranteeing accuracy for individual animal data in any tracing or recording procedure worldwide.





FROM POST-WAR RECOVERY TO PRECISION GENOMICS

Italian Style

75 Years of Data, Genetics, and Breeders' Associations in Italy

75 Years of Evolution: Four Eras of Italian Genetics

1950-1970
The Reconstruction

Rebuilding herds, importing genetics.

Basic Artificial Insemination

1970-1990
The Productivity Era

Maximizing yield to amortize fixed costs.

Animal recording & early mainframes

1991-2010
Quality & Regionalization

Fat/protein content, animal welfare.

PC networks & complex indexing

2011-Present
Genomic & Digital

Sustainability, PLF, biodiversity.

DNA chips & IoT sensors


Tier 3: The Synthesis
Tier 2: The Breeder-Managed Engine
Tier 1: The Public Foundation
World-Class Dairy & Meat Genetics
The Feedback Loop:
Phenotypic data extracted from Performance Recording acts as the indispensable fuel for the Herdbook's genetic selection.
Libro Genealogico (The Herdbook)
Managed by: ANA
The Director:
Guides selection activities based on strict technical disciplines to improve and valorize distinct breeds.
Controlli Funzionali (Performance Recording)
Managed by: AIA / ARA
The Data Engine:
Systematic, unified measursment of productivity, reproduction, and health across ~60% of Italy's dairy cows.
The State (MASAF)
· Provides legislative frameworks.
· Ensures core national funding.
The Economic Imperative
Without this joint financial support and legal delegation, centralized functional data collection would be cost-prohibitive for individual farmers.
Regional Governments
· Execute territorial support.
· Co-fund local innovations.
NotebookLM

A Legacy of Innovation. A Future of Integration.

80%

Of all Italian commercial milk is now actively monitored by the system.

100%

Commitment to ICAR guidelines for global benchmarking.

1 Unified Network

Bridging physical PLF sensors to genomic prediction.

Italy stands ready to host the world and showcase the future of precision animal recording.

The Evolution of Precision: Measuring, Recording & Sampling Devices

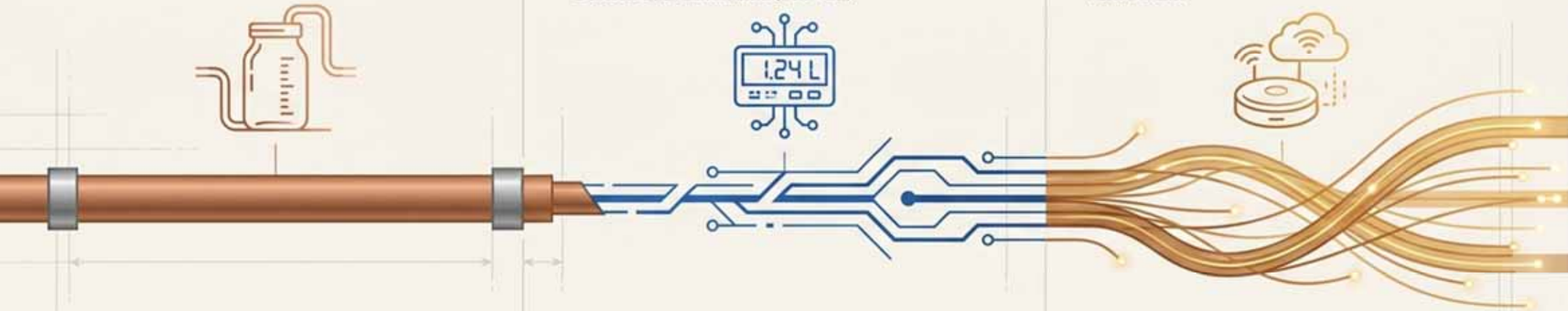
Adapting global standards over 50 years—from mechanical jars to dynamic sensor networks.

The Data Stream

1968: ICAR initiates precision testing for early milk recording devices.

1998: Formally codified at the 31st ICAR Session (New Zealand) as the Sub-Committee on Meters and Jars. Later renamed the Recording and Sampling Devices Sub-Committee (RSD-SC).

Present: Operates as the Measuring, Recording & Sampling Devices Sub-Committee (MRSD-SC), integrating the Sensor Devices Task Force.



The Mechanical Foundation (1968 – 1997)

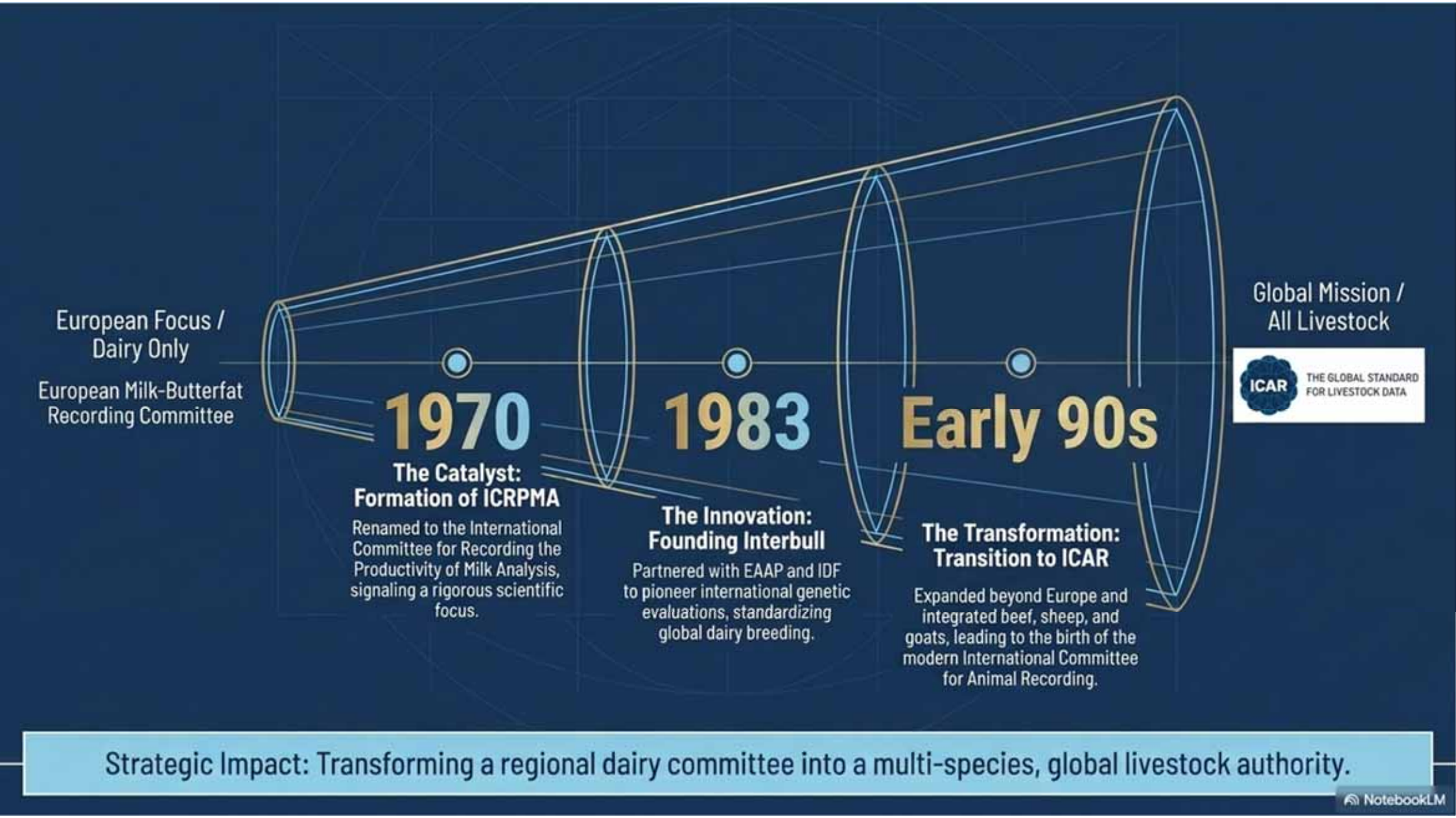
Established 'Lifetime Approvals' for mechanical milk meters, physical buckets, and glass recorder jars.

The Electronic Transition (1998 – 2014)

Expanded scope beyond cattle to sheep and goat guidelines. Established a global network of 5 independent test centers to evaluate electronic meters and sampling devices.

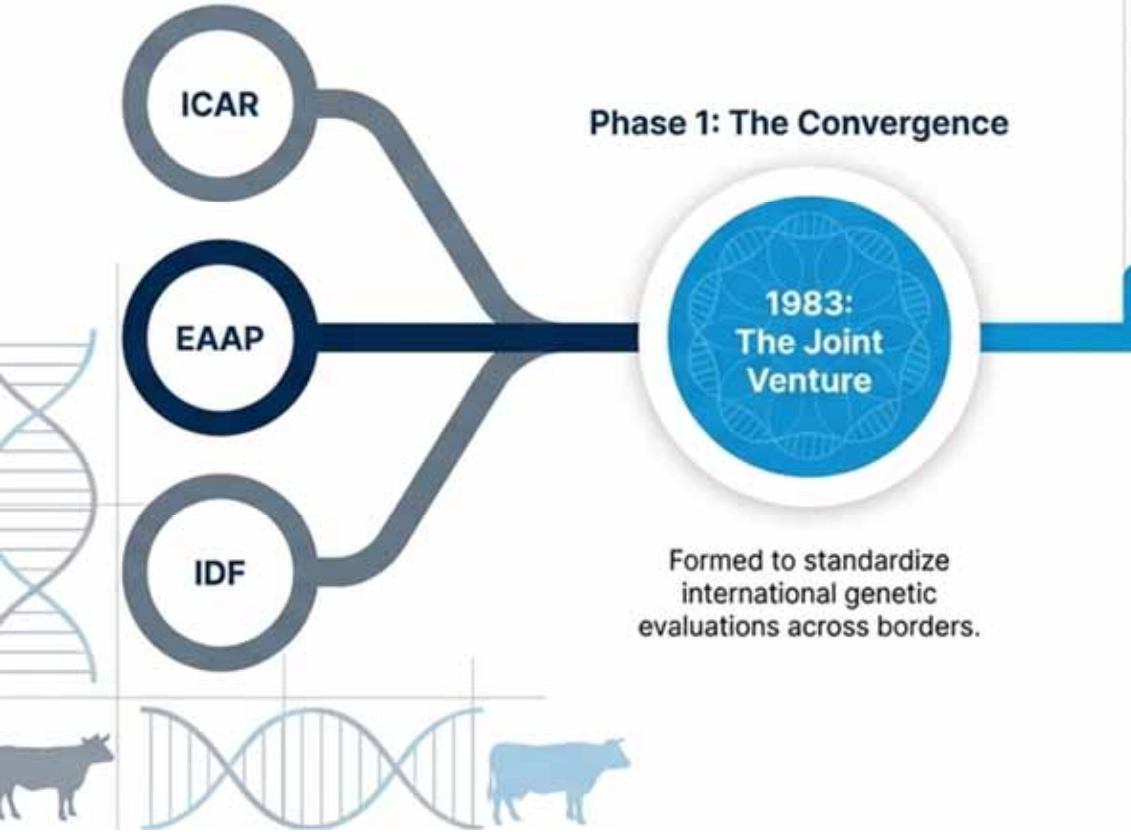
The Sensor Age (2015 – Present)

2018 Paradigm Shift: Transitioned from 'lifetime approvals' to an agile Annual Dynamic Certification model to continuously validate rapid software/firmware updates and Precision Livestock Farming (PLF) sensors.


European Focus / Dairy Only
European Milk-Butterfat Recording Committee
1970
The Catalyst: Formation of ICRPMA
Renamed to the International Committee for Recording the Productivity of Milk Analysis, signaling a rigorous scientific focus.
1983
The Innovation: Founding Interbull
Partnered with EAAP and IDF to pioneer international genetic evaluations, standardizing global dairy breeding.
Early 90s
The Transformation: Transition to ICAR
Expanded beyond Europe and integrated beef, sheep, and goats, leading to the birth of the modern International Committee for Animal Recording.
Global Mission / All Livestock
ICAR
THE GLOBAL STANDARD FOR LIVESTOCK DATA
Strategic Impact: Transforming a regional dairy committee into a multi-species, global livestock authority.
NotebookLM

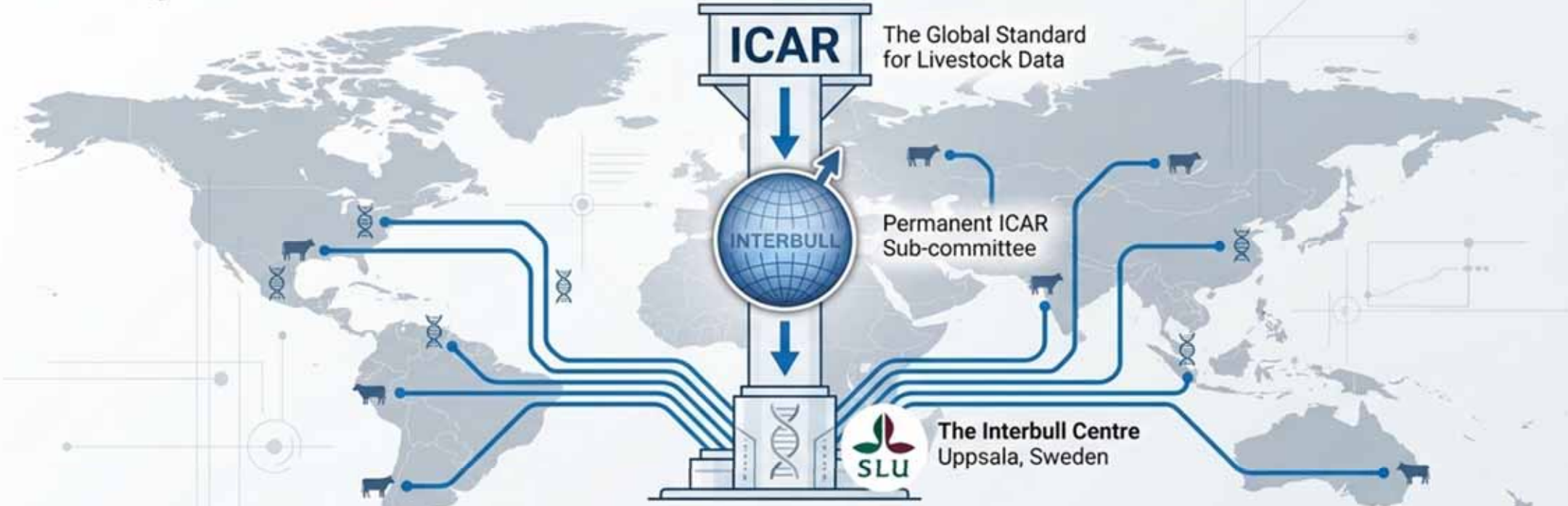
Forging the Global Standard for Cattle Genetics

The structural evolution and formal integration of the International Bull Evaluation Service (1983–1991).



The World's Hub for Genetic Information Services

Since its integration, Interbull has facilitated the seamless global exchange of breeding values for cattle.



The world's network for genetic information, driving the global exchange of cattle breeding values.

The Interbull Centre
Uppsala, Sweden

A Legacy of Leadership and Global Collaboration

Leadership Legacy Roster

- Hans-Otto Gravert
- Brian Wickham
- Jean-Claude Mocquot
- Reinhard Reents
- Matthew Shaffer
- Urs Schnyder

Historical Interbull Meeting

Early Pioneers

Jean-Claude Mocquot, Andy Zarnecki, Gottfried Averdunk, Jan Philipsson, Brian Wickham, Martin Sieber, Felipe Ruiz, Juan Pena, Jarmo Juga, Andrea Georgondis, Gunilla Bratt, Jürgen Claus, Georgios Banos, John Hodges, Sepp Lederer, Rex Powell, Ted Burnside, Torsein Steine, Paola Rozzi, Wim Vinmann, Paul Miller, Tom Teehan, Hans Wilmink, Gordon Swanson (other participants still pending identification...)

(sor: https://interbull30years.blogspot.com/

Beyond the algorithms and data centers, Interbull's enduring success relies on an active global community—uniting over 130 organizations from 60 countries to drive the continuous genetic improvement of global livestock.

Modern goat dairy operations require fast, accurate data capture at scale.

Establishing Global Standards for Dairy Goats

1990

The ICAR Milk Recording in Goats group was formally established to ensure, standardize, and oversee milk recording practices specifically for dairy goats worldwide.

Goat dairy operations differ drastically from cattle, typically involving large flocks (200–500 females) and high-speed milking routines requiring one sampling every 15–20 seconds. This necessitates specialized, highly efficient recording designs.

To solve this, the group successfully championed standardized simplified designs—such as the AT or AC methods (recording only one milking per day). Today, these simplified methods account for over 90% of official goat milk recording globally, tracking over 410,000 does in 2021 alone.

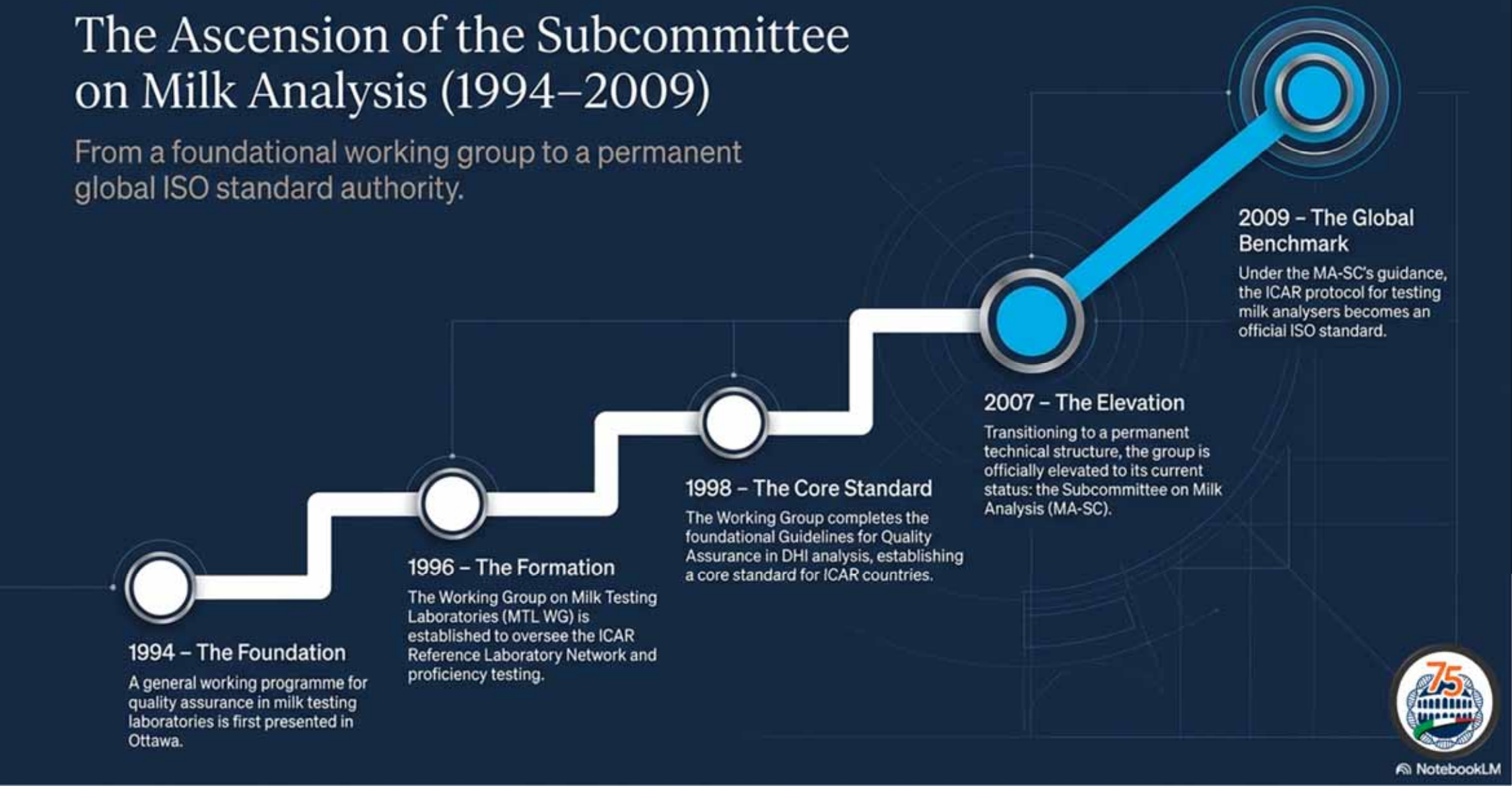
1991: Expanding the Standard to Dairy Sheep

The year after the goat group's inception, in 1991, the Milk Recording in Sheep group was formed. Its mandate was to fulfill the exact same objectives of the goats group, but specifically tailored to the physiological and operational realities of dairy sheep.

Bringing vital Mediterranean and Central/Eastern European agricultural staples under the ICAR quality umbrella. Today, this standard governs over 890,000 dairy sheep in official milk recording worldwide.

The Ascension of the Subcommittee on Milk Analysis (1994–2009)

From a foundational working group to a permanent global ISO standard authority.



The Early Nineties Pivot: A New Global Identity

Global Expansion

Influx of member countries from continents beyond Europe

Expanded Scope

Inclusion of recording traits far beyond just milk

A New Identity

International Committee for Animal Recording (ICAR)

Introduced in 1990: A new name to reflect a truly universal mandate

Due to the rapid influx of global members and the inclusion of non-milk traits, dropping the regional and single-trait labels cemented the organization's destiny as a universal biological authority

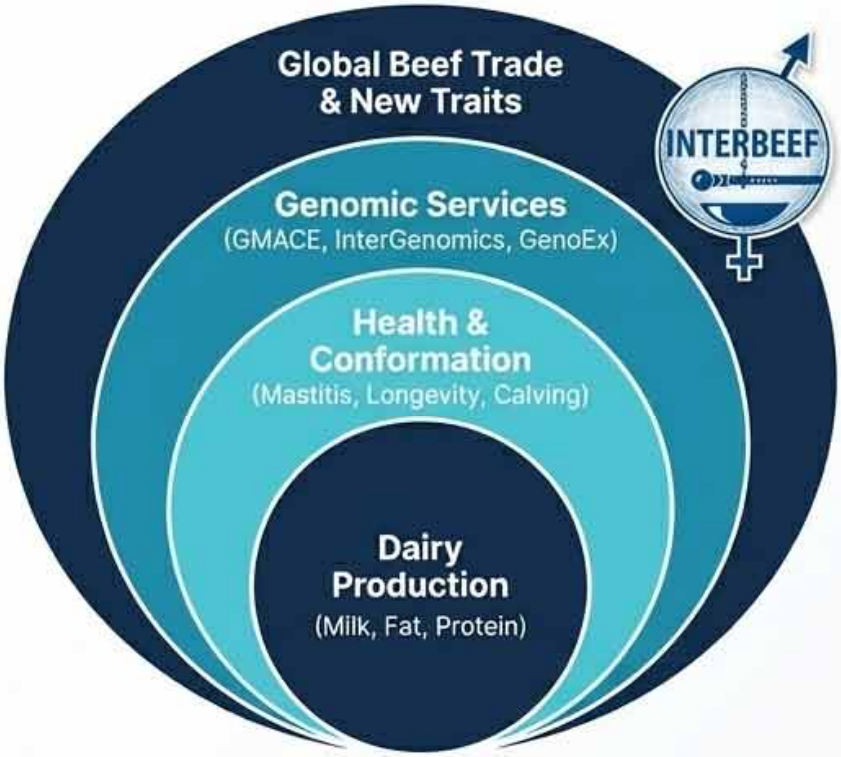
The Transition to Digital Tracking

1. Late 1980s: Inauguration of the Working Group on Animal Identification to manage the growing need for individual animal tracking.

2. 1998: Upgraded to the permanent Animal Identification Sub-Committee (ID-SC) to manage advancing technologies.

3. 2006: The **ISO Milestone**. ICAR achieves a landmark agreement, becoming the official Registration Authority for **ISO 11784** and **11785** standards, governing testing for all global electronic identification (RFID) devices.

Expanding ICAR's Global Mandate



The Achievement

Interbull has successfully created a transnational space of commensurability, driving ICAR from basic data recording to orchestrating complex, multi-breed genomic evaluations.

The Future

Sustained investment in Interbull—including the Interbeef Strategic Roadmap and multi-trait single-step evaluations—is essential to secure ICAR's position as the ultimate, independent authority in global animal genetics.

The Future

The ICAR President's Award

EST. 2006

Recognizing the outstanding expertise of an industry professional in advancing ICAR activities.

The Roll of Honour

2025 – Matthew Shaffer	2015 – Christa Egger-Danner
2024 – Niels Henning Nielsen	2014 – Milan Zjalic
2023 – Andrew Comie and Martin Burke	2013 – Christian Baumgartner
2022 – Robert Fourdraine and Bert van't Land	2012 – Frank Armitage
2021 – Jay Mattison	2011 – Badi Besbes
2020 – Hans Wilmink	2010 – Ole Klejs Hansen
2019 – Reinhard Reents	2009 – Brian Wickham
2018 – Steven Sievert	2008 – Joseph Crettenand
2017 – Uffe Lauritsen	2007 – Jean Stoll
2016 – Brian van Doormaal	2006 – Olivier Leray

The ICAR Outstanding Contribution Award

EST. 2019

Celebrating professionals or teams that have made an outstanding, broad-scale contribution to ICAR's activities.

Step 1: Peer Nomination
Sourced from Staff or Chairs/Members of ICAR SC/WG/TF

Step 2: Awards Committee Review
Evaluate nominations and formulate recommendations

Step 3: Board Final Choice
Final approval for an individual or a collaborative team effort

2025 – Tone Roalkvam

2024 – Jean-Michel Astruc

2023 – Elena Couto

2022 – Andrew Cook and Harrie van den Bijgaart

2021 – Enrico Santus

2020 – Susanne Gäckler

2019 – Kees de Koning


Animal Identification
Over 560 ISO-certified RFID devices
Milk Recording
Over 58 certified milk meters and analyzers
Certificate of Quality (CoQ)
Genetic Verification
Accredited DNA Data Interpretation Centres for STR and SNP-based parentage testing
Providing a neutral, level playing field for manufacturers and ensuring farmers make vital management decisions based on absolute, validated truth.
NotebookLM


134
Total Members
(83 Full Members | 51 Associate Members)
9
Working Groups
(Including Animal Data Exchange, DNA, Functional Traits, Sheep/Goats/Camelids)
4
Sub-Committees
(Animal Identification, Measuring/Recording Devices, Milk Analysis, Interbull)
11
Board Members
(Maximum board capacity, supported by Chief Executive and two Inspectors)
75
NotebookLM

A Connected Ecosystem of Global Partnerships

Uniting standards, policy, and science to drive innovation in animal identification and recording across **60 countries**.

1. The Central Hub (Core)

ICAR

Core Mission:
Independent Guidelines, Standards & Certification

2. Top-Left Node: Technical Standardization

ISO

Technical Standardization

Aligning animal ID, sampling devices, and milk recording technologies with rigorous, globally recognized technical standards (e.g., ISO certified devices).

3. Top-Right Node: Global Policy & Security

FAO

Global Policy & Security

Harmonizing animal tracking, genetic evaluation, and farm animal production data to support international food security and agricultural policies.

4. Bottom-Left Node: Industry & Scientific Exchange

IDF FIL

EAAP

Industry & Scientific Exchange

Bridging the gap between dairy/animal production science and practical application through shared expertise, guidelines, and international working groups.

5. Bottom-Right Node: Innovation & Future Research

SMARTER Project

Innovation & Future Research

Driving forward-looking European research initiatives focused on breeding for efficiency, resilience, and reducing environmental impact in livestock.

The 2016 Rebrand: Aligning Identity with Reality

For the first time in 65 years, the brand modernized to match a digital, global era.

The Past

Manual milk recording and physical lifetime mechanical stamps.

The Present

- Regional overlapping circles forming a single globe.
- A stylized double helix representing DNA and continuous genetic improvement.

THE GLOBAL STANDARD FOR LIVESTOCK DATA

- The new mandate: **"The Global Standard for Livestock Data".**
- Regional overlapping circles forming a single globe.

The Core Deliverables: Network · Guidelines · Certification

The Visionaries: Chairpersons of ICAR (1951–2026)

A.M. Leroy
(France) | 1

Klaus Meyn
(Germany) | 1990–1994

Wim Wismans
(Netherlands) | 1994–1998

Joseph Crettenand
(Switzerland) | 1998–2002

Mark Jeffries
(New Zealand) | 2002–2004

Jarmo Juga
(Finland) | 2004–2006

Neil Petreny
(Canada) | 2006–2010

Uffe Lauritsen
(Denmark) | 2010–2014

Hans Wilmink
(Netherlands) | 2014–2017

Jay Mattison
(USA) | 2017–2020

Daniel Lefebvre
(Canada) | 2020–2026

The Engine Room: Secretaries General & CEOs

Kristof Kallay
(Hungary)

Jean Boyazoglu
(Greece) 1987–1992

Nicolas Frydlander
(France) 1992–1996

Brian Wickham
(New Zealand) 2014–2015 *(Interim)*

Andrea Rosati
(Italy) 2003–2014

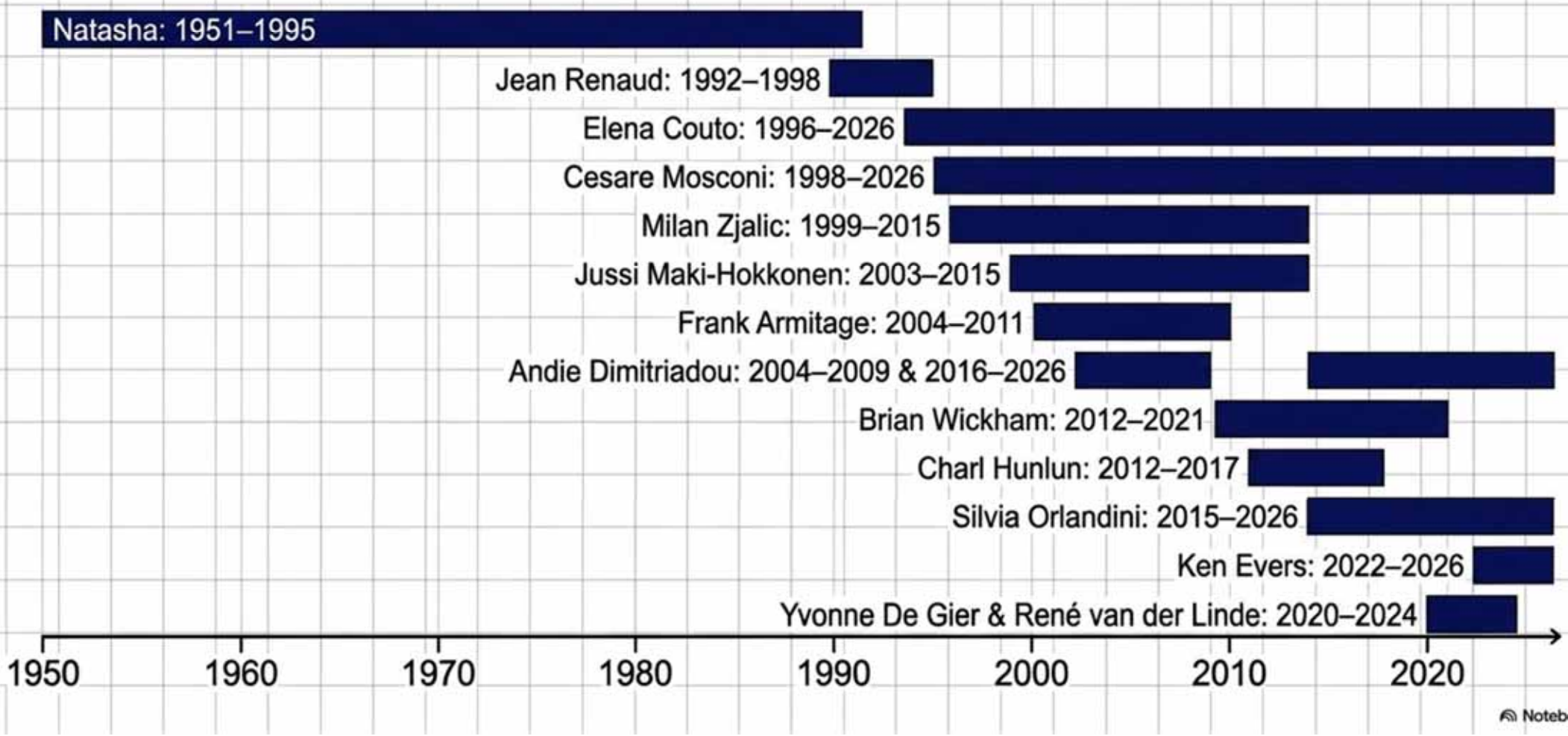
Jean Boyazoglu
(Greece) 1996–2003

Martin Burke (Ireland)
2015–2023 & 2024–2026 *(Interim)*

Marie-Agnès Mourot
(Netherlands) | 2023–2024

Ana Granados Chapatte
(Spain) | 2026

The Custodians of Continuity



75 Years of Adaptation: Then vs. Now

	1951	2026
Geographic Scope	10 European Nations 	130 Members across 60+ Countries 
Traits Recorded	Milk & Butterfat Volume 	Genetics, DNA, Health, Conformation, & Methane 
Core Output	Regional Yield Tests 	ISO Standards, RFID, & Predictive Analytics 
Identity	European Milk/Butter Recording Committee 	The Global Standard for Livestock Data 


Share.
Connect.
Transform.
75
ICAR
The tools have evolved from mechanical glass jars to predictive algorithms, but the mission remains unchanged: sharing global solutions to support livestock excellence and global food security.
Thank you to our Members, Partners, and Volunteers for 75 years of innovation.
NotebookLM